BRUHAT BANGALORE MAHANAGARA PALIKE

Name of the work: Improvements to roads and drains of BB Nagara in ward no. 8 kodigehalli

BILL OF QUANTITIES

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., .complete as per specifications and directions of the Engineer in charge.	Each	1.00	1938.46	Rupees One Thousand Nine Hundred Thirty Eight and Forty Six Paise Only
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) 0 to 50 m .complete as per specifications and directions of the Engineer in charge.	Rm	50.00	315.18	Rupees Three Hundred Fifteen and Eighteen Paise Only
3	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) 50 to 100 m .complete as per specifications and directions of the Engineer in charge.	Rm	50.00	412.00	Rupees Four Hundred Twelve Only
4	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) 100 to 150 m .complete as per specifications and directions of the Engineer in charge.	Rm	50.00	458.35	Rupees Four Hundred Fifty Eight and Thirty Five Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
5	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,)150 to 200 m.complete as per specifications and directions of the	Rm	50.00	484.10	Rupees Four Hundred Eighty Four and Ten Paise Only
6	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) 200 to 250 m .complete as per specifications and directions of the	Rm	50.00	560.32	Rupees Five Hundred Sixty and Thirty Two Paise Only
7	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) 251 to 300 m .complete as per specifications and directions of the Engineer in charge	Rm	50.00	600.49	Rupees Six Hundred and Forty Nine Paise Only
8	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) 300 to 350 m .complete as per specifications and directions of the	Rm	50.00	640.66	Rupees Six Hundred Forty and Sixty Six Paise Only
9	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) 350 to 375 m .complete as per specifications and directions of the Engineer in charge.	Rm	25.00	698.07	Rupees Six Hundred Ninety Eight and Seven Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

8/11
Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92
8/11

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
10	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) .complete as per specifications and directions of the Engineer in charge.	Rm	54.00	1325.00	Rupees One Thousand Three Hundred Twenty Five Only
11	Providing and fixing to wall, ceiling and floor unplasticised PVC 6.00 kgs/sqcm working pressure with pipe fittings, wall clips etc., and making good the wall, ceiling and floor for sanitary pipelines including cost of all materials, labour charges, HOM of acquirements and testing complete as per specifications. - 250mm dias..complete as per specifications and directions of the Engineer in charge.	Rm	12.00	2175.12	Rupees Two Thousand One Hundred Seventy Five and Twelve Paise Only
12	Providing MS Casing pipe collars .complete as per specifications and directions of the Engineer in charge.	No.	9.00	150.00	Rupees One Hundred Fifty Only
13	Providing 175mm dia ms casing cap p.complete as per specifications and directions of the Engineer in charge.	No.	1.00	100.00	Rupees One Hundred Only
14	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings..complete as per specifications and directions of the Engineer in charge.	Unit	1.00	72126.00	Rupees Seventy Two Thousand One Hundred Twenty Six Only
15	KSRB13-3.1: Providing and fixing to wall celling and floor glavanised/ mild steel tubes (medium grade 1.27 kg /mt) B class 50 mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications..complete as per specifications and directions of the Engineer in charge.	Rm	320.00	542.72	Rupees Five Hundred Forty Two and Seventy Two Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
16	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and Powder coated extrued PVC sheathed suitable for working voltage upto 1100 Volts as per IS - 694 ; 1990 AND CONFORMING TO gtp OFGROUP 3cx 6.0 Sqm KPWD .complete as per specifications and directions of the Engineer in charge.	Rm	640.00	188.70	Rupees One Hundred Eighty Eight and Seventy Paise Only
17	Labour charges for erection of new / repaired submersible pumpset along with gi pipes inculding transportion each length .complete as per specifications and directions of the Engineer in charge.	No.	50.00	88.00	Rupees Eighty Eight Only
18	Supplying and flush polished wood board with out front frount plank made of not less than 15mm thick plank after due groove cutting Finishing with necessary on fixing the same to the wall using tapered inverted wooden plugs screws etc.,.complete as per specifications and directions of the Engineer in charge.	Each	1.00	302.00	Rupees Three Hundred Two Only
19	Supplying of 1.1 KV LT UG cable having aluminium condutor PVC insulated shethed, EXTRUDED INNER SHEATHRD galvnised steel,stirp confirming IS 3975;1990 AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group. (4 core 16 Sqmm).complete as per specifications and directions of the Engineer in charge.	Rm	35.00	140.40	Rupees One Hundred Forty and Forty Paise Only
20	Labour charges for laying of 1.1 K.V class UG cable, P No. 61 / I No. 7.8.1 In existing trencg/duct 6Sqmm to 16 Sqmm) .complete as per specifications and directions of the Engineer in charge.	Rm	35.00	10.80	Rupees Ten and Eighty Paise Only
21	Digging or trenching of 0.6m deep x 0.5 mtr wide refilling the trench to the required ground level and consolidating etc.,.complete as per specifications and directions of the Engineer in charge.	Rm	30.00	117.00	Rupees One Hundred Seventeen Only
22	Supplying and fixing of Class A (meaium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.complete as per specifications and directions of the Engineer in charge.	Rm	3.00	345.00	Rupees Three Hundred Forty Five Only
23	Supplying and fixing L.T. cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.,.complete as per specifications and directions of the Engineer in charge.	No.	1.00	280.00	Rupees Two Hundred Eighty Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
24	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia, .complete as per specifications and directions of the Engineer in charge.	No.	1.00	2727.00	Rupees Two Thousand Seven Hundred Twenty Seven Only
25	Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., .complete as per specifications and directions of the Engineer in charge.	Each	3.00	360.00	Rupees Three Hundred Sixty Only
26	Supplying and fixing of heavy duty glands for ug cable 1.1 kv etc., .complete as per specifications and directions of the Engineer in charge.	Each	6.00	86.00	Rupees Eighty Six Only
27	Supplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 32 amps triple pole with all lead and lift, loading, unloading and labour charges etc .complete as per specifications and directions of the Engineer in charge.	Each	1.00	1547.00	Rupees One Thousand Five Hundred Forty Seven Only
28	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.33 .complete as per specifications and directions of the Engineer in charge.	Sqmm	37650.00	0.33	Thirty Three Paise Only
29	Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads .complete as per specifications and directions of the Engineer in charge.	Each	1.00	1409.80	Rupees One Thousand Four Hundred Nine and Eighty Paise Only
30	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc..complete as per specifications and directions of the Engineer in charge.	No.	2.00	222.60	Rupees Two Hundred Twenty Two and Sixty Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92
8/11

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
31	Gate value 50 mm nominal bore gun metal .complete as per specifications and directions of the Engineer in charge.	No.	3.00	1398.31	Rupees One Thousand Three Hundred Ninety Eight and Thirty
32	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. PRED Bangalore Circle SE Approved Date 30.07.2010 15HP to 30 HP Star Delta Starter.complete as per specifications and directions of the Engineer in charge.	No.	1.00	10000.00	Rupees Ten Thousand Only
33	Earth work excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, in ordinary soil, exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with all lead upto 50m after breaking of clods complete as per specifications..complete as per specifications and directions of the Engineer in charge.	cum	33.75	263.94	Rupees Two Hundred Sixty Three and Ninety Four Paise Only
34	Sand Filling in Foundation Trenches as per Drawing & Technical SpecificationMORTH .complete as per specifications and directions of the Engineer in charge.	cum	5.63	2183.60	Rupees Two Thousand One Hundred Eighty Three and Sixty Paise Only
35	Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure 50mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing.complete as per specifications and directions of the Engineer in charge.	Rm	50.00	249.10	Rupees Two Hundred Forty Nine and Ten Paise Only
36	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. .complete as per specifications and directions of the Engineer in charge.	cum	28.13	80.56	Rupees Eighty and Fifty Six Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92
8/11

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
37	Earth work excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3.complete as per specifications and directions of the Engineer in charge.	Cum	791.13	189.74	Rupees One Hundred Eighty Nine and Seventy Four Paise Only
38	Providing and filling in foundation with granite / trap broken metal 100mm, and downsize and with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all leaed and lift.,,,.complete as per specifications and directions of the Engineer in charge.	Cum	72.72	2574.74	Rupees Two Thousand Five Hundred Seventy Four and Seventy Four Paise Only
39	Providing and laying in position plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs using 40mm and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing .complete as per specifications and directions of the Engineer in charge.	Cum	181.16	5408.12	Rupees Five Thousand Four Hundred Eight and Twelve Paise Only
40	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour .complete as per specifications and directions of the Engineer in charge.	Sqm	758.40	379.48	Rupees Three Hundred Seventy Nine and Forty Eight Paise Only
41	Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery .complete as per specifications and directions of the Engineer in charge.	tonne	12.53	75255.76	Rupees Seventy Five Thousand Two Hundred Fifty Five and Seventy Six Paise Only
42	Providing and laying cement concrete using 20mm and down size granite jelly of ready mixed concrete (RMC) for R.C.C works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, form works and scaffoldings to withstand pumping of concrete, with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) Ready mixed Cement concrete M-20 (1:1.5:3) for raft foundation, column footing, main and secondary beams..complete as per specifications and directions of the Engineer in charge.	cum	193.92	5770.64	Rupees Five Thousand Seven Hundred Seventy and Sixty Four Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

8/11

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

8/11

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
43	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate).complete as per specifications and directions of the Engineer in charge.	Sqm	287.28	2337.00	Rupees Two Thousand Three Hundred Thirty Seven Only
44	Providing and laying in position reinforced cement concrete M20 mix with stone aggregates 20mm and downsize for slab (including steel reinforcement) including centering and shuttering, maching mixed, concrete laid in layers not exceeding 15cm thick well compacted cost of all materials, labour, HOM of machineries, curing complete as per specifications. - 200 mm thick (Approved data rate enclosed) .complete as per specifications and directions of the Engineer in charge.	Sqm	74.40	5300.00	Rupees Five Thousand Three Hundred Only
45	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete as per specifications and directions of the Engineer in charge.	Sqm	123.12	966.72	Rupees Nine Hundred Sixty Six and Seventy Two Paise Only
46	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300 kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.64 cum and fine aggregares @ 0.43 cum with superplastisiser @ 3lts confirming to IS9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing .complete as per specifications and directions of the Engineer in charge.	Cum	108.44	5647.68	Rupees Five Thousand Six Hundred Forty Seven and Sixty Eight Paise Only
47	Vaccum De-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator HOM of machinery Screed Vibratiry, Power Floater, blade and disc etc., with all lead and lift. .complete as per specifications and directions of the Engineer in charge.	Sqm	685.50	72.08	Rupees Seventy Two and Eight Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92
8/11

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
48	Providing groove cutting for width of 5mm to 10mm and depth 80mm -100mm including cost of cutting machine , generater &HOM of machinery ,including cost of blade , coolant etc ., including cleaning of groove &providing sand and hot bitumen fillars and filler metal etc., including cost of conveyance of all materials , labour lead and lift charges and all other incident charges as per drawing..complete as per specifications and directions of the Engineer in charge.	Rm	24.50	143.10	Rupees One Hundred Forty Three and Ten Paise Only
49	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km .complete as per specifications and directions of the Engineer in charge.	Cum	672.46	87.56	Rupees Eighty Seven and Fifty Five Paise Only

EXECUTIVE ENGINEER-4
KRIDL BBMP DIVISION
BENGALURU-560 010

8/11

Executive Engineer
BBMP

8/11